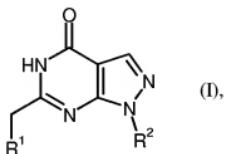


This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Previously presented) A compound of the formula



in which

R¹ is C₁-C₈-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl or C₃-C₈-cycloalkyl, where C₁-C₈-alkyl is optionally substituted by oxo, and

where C₁-C₈-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl and C₃-C₈-cycloalkyl are optionally substituted by up to 3 radicals independently of one another selected from the group of C₁-C₆-alkyl, C₁-C₆-alkoxy, hydroxycarbonyl, cyano, amino, nitro, hydroxy, C₁-C₆-alkylamino, halogen, trifluoromethyl, trifluoromethoxy, C₆-C₁₀-arylcarbonylamino, C₁-C₆-alkylcarbonylamino, C₁-C₆-alkylaminocarbonyl, C₁-C₆-alkoxycarbonyl, C₆-C₁₀-arylaminocarbonyl, heteroarylaminocarbonyl, heteroarylcarbonylamino, C₁-C₆-alkylsulphonylamino, C₁-C₆-alkylsulphonyl, C₁-C₆-alkylthio,

where

C₁-C₆-alkyl, C₁-C₆-alkoxy, C₁-C₆-alkylamino, C₆-C₁₀-arylcarbonylamino, C₁-C₆-alkylcarbonylamino, C₁-C₆-alkylaminocarbonyl, C₁-C₆-alkoxycarbonyl, C₆-C₁₀-arylaminocarbonyl, heteroarylaminocarbonyl,

heteroarylcarbonylamino, C₁-C₆-alkylsulphonylamino, C₁-C₆-alkylsulphonyl and C₁-C₆-alkylthio are optionally substituted by one to three radicals independently of one another selected from the group of hydroxy, cyano, halogen, trifluoromethyl, trifluoromethoxy, hydroxycarbonyl and a group of the formula -NR³R⁴,

where

R³ and R⁴ are independently of one another hydrogen or C₁-C₆-alkyl,

or

R³ and R⁴ together with the nitrogen atom to which they are bonded are 5- to 8-membered heterocyclyl,

R² is phenyl or heteroaryl, where phenyl is substituted by 1 to 3 radicals and heteroaryl is optionally substituted by 1 to 3 radicals in each case independently of one another selected from the group of C₁-C₆-alkyl, C₁-C₆-alkoxy, hydroxycarbonyl, cyano, trifluoromethyl, trifluoromethoxy, amino, nitro, hydroxy, C₁-C₆-alkylamino, halogen, C₆-C₁₀-arylcarbonylamino, C₁-C₆-alkylcarbonylamino, C₁-C₆-alkylaminocarbonyl, C₁-C₆-alkoxycarbonyl, C₆-C₁₀-arylamino, heteroarylamino, heteroarylaminocarbonyl, heteroarylcarbonylamino, C₁-C₆-alkylsulphonylamino, C₁-C₆-alkylsulphonyl and C₁-C₆-alkylthio,

where C₁-C₆-alkyl, C₁-C₆-alkoxy, C₁-C₆-alkylamino, C₆-C₁₀-arylcarbonylamino, C₁-C₆-alkylcarbonylamino, C₁-C₆-alkylaminocarbonyl, C₁-C₆-alkoxy-carbonyl, C₆-C₁₀-arylamino, heteroarylamino, heteroarylaminocarbonyl, heteroarylcarbonylamino, C₁-C₆-alkylsulphonylamino, C₁-C₆-alkylsulphonyl and C₁-C₆-alkylthio are optionally substituted by one to three radicals independently of one another selected from the group of hydroxy, cyano, halogen, trifluoromethyl, trifluoromethoxy, hydroxycarbonyl and a group of the formula -NR³R⁴,

where

R^3 and R^4 have the meanings indicated above,

or a salt thereof.

2. (Previously presented) The compound of claim 1, where

R^1 is C_1 - C_8 -alkyl, C_2 - C_6 -alkenyl, C_2 - C_6 -alkynyl or C_3 - C_8 -cycloalkyl, which are optionally substituted by up to 3 radicals independently of one another selected from the group of C_1 - C_6 -alkyl, C_1 - C_6 -alkoxy, hydroxycarbonyl, cyano, amino, nitro, hydroxy, C_1 - C_6 -alkylamino, halogen, C_6 - C_{10} -arylcarbonylamino, C_1 - C_6 -alkylcarbonylamino, C_1 - C_6 -alkylaminocarbonyl, C_1 - C_6 -alkoxycarbonyl, C_6 - C_{10} -arylamino carbonyl, heteroarylamino carbonyl, heteroarylcarbonylamino, C_1 - C_6 -alkylsulphonylamino, C_1 - C_6 -alkylsulphonyl and C_1 - C_6 -alkylthio,

where C_1 - C_6 -alkyl, C_1 - C_6 -alkoxy, C_1 - C_6 -alkylamino, C_6 - C_{10} -arylcarbonylamino, C_1 - C_6 -alkylcarbonylamino, C_1 - C_6 -alkylaminocarbonyl, C_1 - C_6 -alkoxycarbonyl, C_6 - C_{10} -arylamino carbonyl, heteroarylamino carbonyl, heteroarylcarbonylamino, C_1 - C_6 -alkylsulphonylamino, C_1 - C_6 -alkylsulphonyl and C_1 - C_6 -alkylthio are optionally substituted by a radical selected from the group of hydroxy, cyano, halogen, hydroxycarbonyl and a group of the formula $-NR^3R^4$,

where

R^3 and R^4 are independently of one another hydrogen or C_1 - C_6 -alkyl,

or

R^3 and R^4 together with the nitrogen atom to which they are bonded are 5- to 8-membered heterocyclyl,

R² is phenyl or heteroaryl, where phenyl is substituted by 1 to 3 radicals and heteroaryl is optionally substituted by 1 to 3 radicals in each case independently of one another selected from the group of C₁-C₆-alkyl, C₁-C₆-alkoxy, hydroxycarbonyl, cyano, trifluoromethyl, amino, nitro, hydroxy, C₁-C₆-alkylamino, halogen, C₆-C₁₀-arylcarbonylamino, C₁-C₆-alkylcarbonylamino, C₁-C₆-alkylaminocarbonyl, C₁-C₆-alkoxycarbonyl, C₆-C₁₀-arylamino, heteroarylamino, heteroarylaminocarbonyl, heteroarylcarbonylamino, C₁-C₆-alkylsulphonylamino, C₁-C₆-alkylsulphonyl, C₁-C₆-alkylthio, where C₁-C₆-alkyl, C₁-C₆-alkoxy, C₁-C₆-alkylamino, C₆-C₁₀-arylcarbonylamino, C₁-C₆-alkylcarbonylamino, C₁-C₆-alkylaminocarbonyl, C₁-C₆-alkoxy-carbonyl, C₆-C₁₀-arylamino, heteroarylamino, C₁-C₆-alkylaminocarbonyl, heteroarylaminocarbonyl, heteroarylcarbonylamino, C₁-C₆-alkylsulphonylamino, C₁-C₆-alkylsulphonyl and C₁-C₆-alkylthio are optionally substituted by a radical selected from the group of hydroxy, cyano, halogen, hydroxycarbonyl and a group of formula -NR³R⁴,

where

R³ and R⁴ have the meanings indicated above,

or a salt thereof.

3. (Previously presented) A compound of claim 1, where

R¹ is C₁-C₅-alkyl or C₃-C₆-cycloalkyl, which are optionally substituted by up to 3 radicals independently of one another selected from the group of C₁-C₄-alkyl, C₁-C₄-alkoxy, hydroxycarbonyl, cyano, amino, hydroxy, C₁-C₄-alkylamino, trifluoromethyl, fluorine, chlorine, bromine, C₆-C₁₀-arylcarbonylamino, C₁-C₄-alkylcarbonylamino, C₁-C₄-alkylaminocarbonyl, C₁-C₄-alkoxycarbonyl, C₆-C₁₀-aryl-

aminocarbonyl, heteroarylaminocarbonyl, heteroarylcarbonylamino, C₁-C₄-alkylsulphonylamino, C₁-C₄-alkylsulphonyl, C₁-C₄-alkylthio,

where C₁-C₄-alkyl and C₁-C₄-alkoxy are optionally substituted by a radical selected from the group of hydroxy, cyano, fluorine, chlorine, bromine, hydroxycarbonyl and a group of the formula -NR³R⁴,

where

R³ and R⁴ are independently hydrogen or C₁-C₄-alkyl,

or

R³ and R⁴ together with the nitrogen atom to which they are bonded are 5- to 6-membered heterocyclyl,

R² is phenyl, pyrimidyl, pyridyl N-oxide or pyridyl, where phenyl is substituted by 1 to 3 radicals and pyrimidyl, pyridyl N-oxide and pyridyl are optionally substituted by 1 to 3 radicals in each case independently of one another selected from the group of C₁-C₄-alkyl, C₁-C₄-alkoxy, hydroxycarbonyl, cyano, trifluoromethyl, amino, hydroxy, C₁-C₄-alkylamino, fluorine, chlorine, bromine, C₆-C₁₀-arylcarbonylamino, C₁-C₄-alkylcarbonylamino, C₁-C₄-alkylaminocarbonyl, C₁-C₄-alkoxycarbonyl, C₆-C₁₀-arylamino carbonyl, heteroarylaminocarbonyl, heteroarylcarbonylamino, C₁-C₄-alkylsulphonylamino, C₁-C₄-alkylsulphonyl, and C₁-C₄-alkylthio,

where C₁-C₄-alkyl and C₁-C₄-alkoxy are optionally substituted by a radical selected from the group of hydroxy, cyano, fluorine, chlorine, bromine, hydroxycarbonyl and a group of the formula -NR³R⁴,

where

R³ and R⁴ have the meanings indicated in claim 1,

or a salt thereof.

4. (Previously presented) A compound of claim 1, where

R¹ has the meanings indicated in claim 1, and

R² is phenyl, pyridyl N-oxide or pyridyl, where phenyl is substituted by 1 to 3 radicals and pyridyl and pyridyl N-oxide are optionally substituted by 1 to 3 radicals in each case independently of one another selected from the group of methyl, ethyl, 2-propyl, trifluoromethyl, methoxy, ethoxy, fluorine and chlorine,

or a salt thereof.

5. (Previously presented) A compound of claim 1, where

R¹ is C₁-C₅-alkyl or C₅-C₆-cycloalkyl, which are optionally substituted by up to 3 radicals independently of one another selected from the group of C₁-C₄-alkyl, trifluoromethyl, fluorine, hydroxy, phenylcarbonylamino, C₁-C₄-alkylcarbonyl-amino, C₁-C₄-alkylaminocarbonyl or phenylaminocarbonyl, and

R² is phenyl, pyridyl N-oxide or pyridyl, where phenyl is substituted by 1 to 3 radicals and pyridyl and pyridyl N-oxide are optionally substituted by 1 to 3 radicals in each case independently of one another selected from the group of methyl, ethyl, 2-propyl, trifluoromethyl, methoxy, ethoxy, fluorine and chlorine,

or a salt thereof.

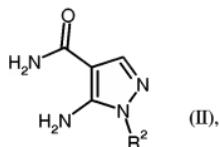
6. (Previously presented) A compound of claim 1, where

R¹ is C₁-C₅-alkyl or C₅-C₆-cycloalkyl, which are optionally substituted by up to 3 radicals independently of one another selected from the group of C₁-C₄-alkyl, fluorine, trifluoromethyl, hydroxy, phenylcarbonylamino, C₁-C₄-alkylcarbonylamino, C₁-C₄-alkylaminocarbonyl or phenylaminocarbonyl, and

R² is phenyl, pyridyl N-oxide or pyridyl, where phenyl is substituted by one radical and pyridyl and pyridyl N-oxide are optionally substituted by one radical in each case independently of one another selected from the group of methyl, ethyl, 2-propyl, trifluoromethyl, methoxy, ethoxy, fluorine and chlorine,
or a salt thereof.

7. (Withdrawn) A process for preparing a compound according to claim 1, comprising:

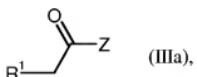
[A] converting a compound of the formula



in which

R^2 has the meanings indicated in claim 1,

by reaction with a compound of the formula

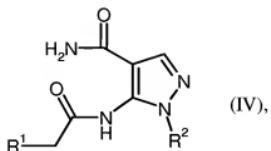


in which R^1 has the meanings indicated in claim 1.

and

Z is chlorine or bromine,

in an inert solvent and in the presence of a base, initially into a compound of the formula



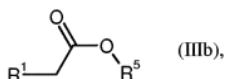
in which

R¹ and R² have the meanings indicated in claim 1,

and then cyclizing in an inert solvent in the presence of a base to a compound of the formula (I),

or

[B] reacting a compound of the formula (II) with a compound of the formula



in which

R¹ has the meanings indicated in claim 1,

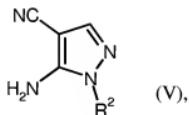
and

R⁵ is methyl or ethyl,

in an inert solvent and in the presence of a base, with direct cyclization to a compound of formula (I),

or

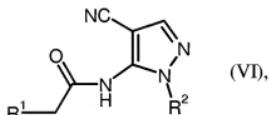
[C] converting a compound of the formula



in which

R^2 has the meanings indicated in claim 1,

initially by reaction with a compound of the formula (IIIa) in an inert solvent and in the presence of a base into a compound of the formula



in which

R^1 and R^2 have the meanings indicated in claim 1,

and cyclizing the compound for formula (VI) in a second step in an inert solvent and in the presence of a base and of an oxidizing agent to a compound of (I),

and the resulting compounds of the formula (I) are where appropriate reacted with the appropriate bases or acids to give a salt thereof.

8. (Cancelled)

9. **(Previously presented)** A pharmaceutical composition comprising at least one compound of any one of claims 1 to 6 and at least one pharmaceutically acceptable, essentially non-toxic carrier or excipient.

10. **(Cancelled)**

11. **(Cancelled)**

12. **(Cancelled)**

13. **(Withdrawn)** A method for the treatment of impairments of perception, concentration, learning and/or memory in a human or animal comprising administering an effective amount of a compound of any one of claims 1 to 6 to the human or animal.

14. **(Withdrawn)** The method according to Claim 13, where the impairment is a consequence of Alzheimer's disease.

15. **(Withdrawn)** A method for producing a medicament useful for treating an impairment of perception, concentration, learning and/or memory in a human or animal, comprising providing a compound according to claim 1 or a salt thereof in a form useful for treating perception, concentration, learning and/or memory in a human or animal.

16. **(Withdrawn)** The method according to Claim 15, where the impairment is a consequence of Alzheimer's disease.

17. **(Currently amended)** A pharmaceutical composition comprising a compound according to claim 1 or a salt thereof, as the active moiety, and at least one pharmaceutically acceptable, essentially non-toxic carrier or excipient.